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Diffuse Lung Disease

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TOPIC: Diffuse Lung Disease

PREDICTORS OF POST-COVID-19 PULMONARY FIBROSIS: A CASE SERIES

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PURPOSE: The characteristics of pulmonary fibrosis in patients with COVID-19 (coronavirus disease 2019) is not well known yet. Pulmonary fibrosis determines non-reversible lung dysfunction. The aim of this study is to identify the risk factors for pulmonary fibrosis in COVID-19 patients so that we can identify early the patients with high risk and administrate proper therapy.

METHODS: From September 2020 to September 2021, using follow-up CT (computed tomography) scans we identified 31 patients with lung fibrosis, who previously had COVID-19.

RESULTS: From the population analyzed we identified as a risk factor advanced age, 67% of the patients being over 60 years old. We also found that 77% of the patients were smokers. The incidence of pulmonary fibrosis was higher in patients with severe form of COVID-19 (77%), than the ones who presented moderate form. The most frequent comorbidities found were arterial hypertension (61%) and obesity (51%). The laboratory findings associated with pulmonary fibrosis were leukocytosis, increased LDH, and inflammatory syndrome. The majority of the patients presented lung function abnormalities, such as restrictive syndrome (61%) impaired diffusion capacity (58%). Most of the patients also presented reduced 6-minute-walk test distance (80%).

CONCLUSIONS: Although there is not a specific cause know yet for post-COVID-19 lung fibrosis, there are some predicting factors, such as cigarette smoking, arterial hypertension, obesity, severe form of COVID-19, leukocytosis, inflammatory syndrome,and increased LDH.

CLINICAL IMPLICATIONS: Early detection of patients with high risk to develop post-COVID-19 pulmonary fibrosis may help the prevention and management of this severe complication.

DISCLOSURE: Nothing to declare.

KEYWORD: post-COVID-19 lung fibrosis

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